

radio, a desk phone, a mobile phone, a PDA, a personal navigation device, a personal media player, a camera, and a watch.

34. The user interface system of claim 1, wherein the substrate at least partially defines a second cavity, wherein the displacement device is also connected to the second cavity and adapted to expand both the first cavity and the second cavity thereby deforming two regions of the surface.

35. The user interface system of claim 1, wherein the substrate at least partially defines a second cavity, further comprising a second displacement device connected to the second cavity and adapted to expand the second cavity thereby deforming a second region of the surface.

36. A peripheral for an electronic device having the user interface system of claim 1, wherein the peripheral is selected from the group consisting of a mouse, a trackpad, a keyboard, and a remote control.

37. A user interface system, comprising:

an elastic layer defining a substantially continuous and substantially planar surface;

a substrate supporting the layer and at least partially defining a cavity that holds a fluid and that has at least two volumetric settings: a retracted volume setting and an extended volume setting;

a displacement device coupled to the cavity and adapted to modify the volume of the fluid thereby expanding the cavity from the retracted volume setting to the extended

volume setting, wherein the cavity in the extended volume setting extends beyond the plane of the surface thereby deforming a particular region of the surface;

a touch sensor coupled to the substrate and adapted to sense a user touch proximate the particular region of the surface;

a display coupled to the substrate and adapted to visually output at least two images, wherein one image includes an image of input key substantially aligned with the particular region of the surface deformable by the cavity, wherein the substrate is located between the layer and the display, and wherein the fluid and the substrate are substantially transparent and are substantially index matched; and

a processor coupled to the touch sensor and adapted to operate the user interface system in at least the following two modes:

first mode: if the particular region of the surface is deformed, then a user touch that further deforms the particular region of the surface is recognized as a user input of a first type, and

second mode: if the particular region of the surface is not deformed, then a user touch at the particular region in the surface is recognized as a user input of a second type that is distinguishable from a user input of the first type.

* * * * *